

CLUSTAL W (1.82) Multiple Sequence Alignments

Sequence format is Pearson

Sequence 1: HrpW 424 aa

Sequence 2: HopPtoA_SEQIDNO7 486 aa

Start of Pairwise alignments

Aligning...

Sequences (1:2) Aligned. Score: 6

Guide tree file created: [/ebi/extserv/old-work/199548.12283.dnd]

Start of Multiple Alignment

There are 1 groups

Aligning...

Group 1: Delayed

Sequence:2 Score:3175

Alignment Score 3

CLUSTAL-Alignment file created [/ebi/extserv/old-work/199548.12283.aln]

199548.12283.aln

CLUSTAL W (1.82) multiple sequence alignment

```
HrpW      MSIGITPRPQQTTTPLDFSALSGKSPQPNTFGEQNTQQAIDPSALLFGSDTQKDVNFGTP 60
HopPtoA_SEQIDNO7 MHINRRVQQPPVTATDSFRTASDASLASSSVRSVSSDQQREINAIADYLTDHVFAAHKLP 60
* *.      :      .*: . * : * . *      . . . . . :*:      :      . . *

HrpW      DSTVQNPQDASKPNDQSNIAKLISALIMSLLOMLTNSNKKQDTNQEQQPDSQAPFQNNGG 120
HopPtoA_SEQIDNO7 PADSADGQAAVDVHNAQITALIETRASRLHFEGETPATIADTFKAKEKLDRLATTTSGAL 120
:      : * * . :*: .      * : :      . : . : : *: * * . . .

HrpW      LGTPSADSGGGGTPDATGGGG-----GDTPSATGGGGGDTPTATGGGGSGGGGTPTA 172
HopPtoA_SEQIDNO7 RATPFAMASLLQYMQPAINKGDWLPAPLKPLTPLISGALSGAMDQVGTKMMDRATGDLHY 180
. ** * : .      : : . *      ** :* . *      . . . *

HrpW      TGGGSGGTPTATGGGEGGVTPQITPQLANP-----NRTSGTGSVSDTAGSTEQAGKIN 225
HopPtoA_SEQIDNO7 LSASPDLRLHDAMAASVKRHSPSLARQVLDTGVAVQTYSA RNAVRTVLAPALASRPVQGA 240
. . . . . * . . . :*: : * : : . . . :* . * : : * :

HrpW      VVKDTIKVGAGEVFDGHGATFTADKSMGNGDQG-----ENQKPMFELAEG-----AT 272
HopPtoA_SEQIDNO7 VDLGVSMAGGLAANAGFGNRLLSVQSRDHQRGGALVLGLKDKEPKAQLSEENDWLEAYKA 300
* . . . * . . * . * : : : * . : *      :*: :*:      :

HrpW      LKNVNLGENEVDG-----IHVKAKNAQEVTIDNVHAQNVGEDLITVKG--EGGAAVTN 323
HopPtoA_SEQIDNO7 IKSASYSGAALNAGKRMAGLPLDMATDAMGAVRSLVSASSLTQNGLLALAGGFAGVGKLQE 360
:* . . . : : .      * :* . . . * * . : : : : * * . : :

HrpW      LNIKNSSAKGADDKVVQLN-----ANTHLKIDNFKADDFGTMVVRTN 364
HopPtoA_SEQIDNO7 MATKNITDPATKA AVSQLTNLAGSAAVFAGWTTAALTTPAVKKAESFIQDTVKSTASST 420
: ** : . . . * **.      : * :* * . : . : .

HrpW      GGKQFDDMSIELNGIEANHGKFALVKSDSDDLKLATGNIAMTDVKHAYDKTQASTQHTEL 424
HopPtoA_SEQIDNO7 TG-YVADQTVKLAKTVKDMGGEAITHTGASLRNTVNNLRQRPAREADIEEGGTAASPSEI 479
* . * :*:      : * *: : : : . : . : : : : *:

HrpW      -----
HopPtoA_SEQIDNO7 PFRPMRS 486
```

199548.12283.dnd

(HrpW:0.46698,HopPtoA_SEQIDNO7:0.46698)